

SEQUENCE LISTING

<110> Yorimasa SUWA et al.

<120> TARGET PROTEIN OF ANTI DIABETIC AND NOVEL ANTI DIABETIC "INSUFUL"

<130> 1254-0305PUS1

<140> 10/569,791

<141> 2006-02-27

<150> PCT/JP04/16996

<151> 2004-11-16

<150> JP 2003/402164

<151> 2003-12-01

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<170> PatentIn Ver. 2.0

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Phe Leu His Pro Ser Glu Thr Ser Val Leu Asn Arg Leu Cys Arg Leu
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Gly Thr Asp Tyr Ile Arg Phe Thr Glu Phe Ile Glu Gln Tyr Thr Gly
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His Val Gln Gln Gln Asp His His Pro Ser Gln Gln Gly Gln Gly Gly
65 70 75 80

Leu His Gly Ile Tyr Leu Arg Ala Phe Cys Thr Gly Leu Asp Ser Val
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Leu Gln Pro Tyr Arg Gln Ala Leu Leu Asp Leu Glu Gln Glu Phe Leu
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Gly Asp Pro His Leu Ser Ile Ser His Val Asn Tyr Phe Leu Asp Gln
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Phe Gln Leu Leu Phe Pro Ser Val Met Val Val Val Glu Gln Ile Lys
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Ser Gln Lys Ile His Gly Cys Gln Ile Leu Glu Thr Val Tyr Lys His
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Ser Cys Gly Gly Leu Pro Pro Val Arg Ser Ala Leu Glu Lys Ile Leu
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Ala Val Cys His Gly Val Met Tyr Lys Gln Leu Ser Ala Trp Met Leu
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His Gly Leu Leu Leu Asp Gln His Glu Glu Phe Phe Ile Lys Gln Gly
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Pro Ser Ser Gly Asn Val Ser Ala Gln Pro Glu Glu Asp Glu Glu Asp
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Leu Gly Ile Gly Gly Leu Thr Gly Lys Gln Leu Arg Glu Leu Gln Asp
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Leu Arg Leu Ile Glu Glu Glu Asn Met Leu Ala Pro Ser Leu Lys Gln
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Phe Ser Leu Arg Val Glu Ile Leu Pro Ser Tyr Ile Pro Val Arg Val
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Ala Glu Lys Ile Leu Phe Val Gly Glu Ser Val Gln Met Phe Glu Asn
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Gln Asn Val Asn Leu Thr Arg Lys Gly Ser Ile Leu Lys Asn Gln Glu
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Asp Thr Phe Ala Ala Glu Leu His Arg Leu Lys Gln Gln Pro Leu Phe
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Ser Leu Val Asp Phe Glu Gln Val Val Asp Arg Ile Arg Ser Thr Val
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Gln Leu Lys Ile Ile Lys Asp Phe Tyr Leu Leu Gly Arg Gly Glu Leu
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His Lys Val Leu Leu Asp Asp Asp Asn Leu Leu Pro Leu Leu His Leu
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Tyr Leu Leu Ser Val Arg Arg Val Gln Ala Glu Leu Gln His Cys Trp
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Ile Lys Trp Arg Leu Arg Asn His Met Ala Phe Leu Val Asp Asn Leu
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Gln Tyr Tyr Leu Gln Val Asp Val Leu Glu Ser Gln Phe Ser Gln Leu
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His Asp His Phe Leu Ser Asn Leu Leu Ala Gln Ser Phe Ile Leu Leu
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Lys Pro Val Phe His Cys Leu Asn Glu Ile Leu Asp Leu Cys His Ser
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Phe Cys Ser Leu Val Ser Gln Asn Leu Gly Pro Leu Asp Glu Arg Gly
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Gln Ala Gly Gly Thr Leu Gly Ser Phe Gly Met
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<210> 3

<211> 667

<212> PRT

<213> Homo sapiens

<400> 3

Met Ile His Glu Leu Leu Leu Ala Leu Ser Gly Tyr Pro Gly Ser Ile
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Phe Thr Trp Asn Lys Arg Ser Gly Leu Gln Val Ser Gln Asp Phe Pro
20 25 30

Phe Leu His Pro Ser Glu Thr Ser Val Leu Asn Arg Leu Cys Arg Leu
35 40 45

Gly Thr Asp Tyr Ile Arg Phe Thr Glu Phe Ile Glu Gln Tyr Thr Gly
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His Val Gln Gln Gln Asp His His Pro Ser Gln Gln Gly Gln Gly Gly
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Leu His Gly Ile Tyr Leu Arg Ala Phe Cys Thr Gly Leu Asp Ser Val
85 90 95

Leu Gln Pro Tyr Arg Gln Ala Leu Leu Asp Leu Glu Gln Glu Phe Leu
100 105 110

Gly Asp Pro His Leu Ser Ile Ser His Val Asn Tyr Phe Leu Asp Gln
115 120 125

Phe Gln Leu Leu Phe Pro Ser Val Met Val Val Glu Gln Ile Lys
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Ser Gln Lys Ile His Gly Cys Gln Ile Leu Glu Thr Val Tyr Lys His
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Ser Cys Gly Gly Leu Pro Pro Val Arg Ser Ala Leu Glu Lys Ile Leu
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Ala Val Cys His Gly Val Met Tyr Lys Gln Leu Ser Ala Trp Met Leu
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His Gly Leu Leu Leu Asp Gln His Glu Glu Phe Phe Ile Lys Gln Gly
195 200 205

Pro Ser Ser Gly Asn Val Ser Ala Gln Pro Glu Glu Asp Glu Glu Asp
210 215 220

Leu Gly Ile Gly Gly Leu Thr Gly Lys Gln Leu Arg Glu Leu Gln Asp
225 230 235 240

Leu Arg Leu Ile Glu Glu Glu Asn Met Leu Ala Pro Ser Leu Lys Gln
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Phe Ser Leu Arg Val Glu Ile Leu Pro Ser Tyr Ile Pro Val Arg Val
260 265 270

Ala Glu Lys Ile Leu Phe Val Gly Glu Ser Val Gln Met Phe Glu Asn
275 280 285

Gln Asn Val Asn Leu Thr Arg Lys Gly Ser Ile Leu Lys Asn Gln Glu

290

295

300

Asp Thr Phe Ala Ala Glu Leu His Arg Leu Lys Gln Gln Pro Leu Phe
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Ser Leu Val Asp Phe Glu Gln Val Val Asp Arg Ile Arg Ser Thr Val
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Ala Glu His Leu Trp Lys Leu Met Val Glu Glu Ser Asp Leu Leu Gly
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Gln Leu Lys Ile Ile Lys Asp Phe Tyr Leu Leu Gly Arg Gly Glu Leu
355 360 365

Phe Gln Ala Phe Ile Asp Thr Ala Gln His Met Leu Lys Thr Pro Pro
370 375 380

Thr Ala Val Thr Glu His Asp Val Asn Val Ala Phe Gln Gln Ser Ala
385 390 395 400

His Lys Val Leu Leu Asp Asp Asp Asn Leu Leu Pro Leu Leu His Leu
405 410 415

Thr Ile Glu Tyr His Gly Lys Glu His Lys Ala Asp Ala Thr Gln Ala
420 425 430

Arg Glu Gly Pro Ser Arg Glu Thr Ser Pro Arg Glu Ala Pro Ala Ser
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Gly Trp Ala Ala Leu Gly Leu Ser Tyr Lys Val Gln Trp Pro Leu His
450 455 460

Ile Leu Phe Thr Pro Ala Val Leu Glu Lys Tyr Asn Val Val Phe Lys
465 470 475 480

Tyr Leu Leu Ser Val Arg Arg Val Gln Ala Glu Leu Gln His Cys Trp
485 490 495

Ala Leu Gln Met Gln Arg Lys His Leu Lys Ser Asn Gln Thr Asp Ala
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Ile Lys Trp Arg Leu Arg Asn His Met Ala Phe Leu Val Asp Asn Leu
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Gln Tyr Tyr Leu Gln Val Asp Val Leu Glu Ser Gln Phe Ser Gln Leu
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Leu His Gln Ile Asn Ser Thr Arg Asp Phe Glu Ser Ile Arg Leu Ala
545 550 555 560

His Asp His Phe Leu Ser Asn Leu Leu Ala Gln Ser Phe Ile Leu Leu
565 570 575

Lys Pro Val Phe His Cys Leu Asn Glu Ile Leu Asp Leu Cys His Ser
580 585 590

Phe Cys Ser Leu Val Ser Gln Asn Leu Gly Pro Leu Asp Glu Arg Gly
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Ala Ala Gln Leu Ser Ile Leu Val Lys Gly Phe Ser Arg Gln Ser Ser
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Leu Leu Phe Lys Ile Leu Ser Ser Val Arg Asn His Gln Ile Asn Ser
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Asp Leu Ala Gln Leu Leu Arg Leu Asp Tyr Asn Lys Tyr Tyr Thr
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Gln Ala Gly Gly Thr Leu Gly Ser Phe Gly Met
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